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EXAMINER	
LUBY, MATTHEW D	
ART UNIT	**PAPER NUMBER**
3611	

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/099,921	Applicant(s) SMITH, JERRY R.	
	Examiner Matt Luby	Art Unit 3611	

-- Th MAILING DATE of this communication app ars on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11,14-25,27-31,33 and 35-46* is/are rejected.

7)☒ Claim(s) *10,12,13,26,32 and 34* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 March 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election

1. Applicant's election with traverse of Species I, Figures 7-13 is noted. It is agreed that all of the claims currently read on Species I. Therefore claims 1-46 have been examined on the merits.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 21 (page 14, 9 lines from the bottom). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "232" has been used to designate both bores and an adaptor (page 19, lines 3 and 14). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Gill et al. (U.S. Patent 6,264,229).

Figures 1-3 clearly show all of Applicant's claimed invention.

6. Claims 11, 35-37 and 42-46 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Andersen al. (U.S. Patent 6,540,246).

Figures 1 and 2 clearly show all of Applicant's claimed invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gill et al.

Gill et al. disclose all of the claimed invention except that the locking element is a spherical ball bearing. It would have been obvious matter of design choice to modify the Andersen et al. reference by having the locking element be a spherical ball bearing (rather than a pin), since applicant has not disclosed that having this type of locking

element solves any stated problem or is for any particular purpose and it appears that the locking element would perform equally well as a pin as disclosed in Gill et al., or any type of releasable locking element, for that matter.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al.

Andersen et al. disclose all of the claimed invention except that the attachment apparatus is a plurality of set screws threadably received in the first end portion of the extension tube. It would have been obvious matter of design choice to modify the Andersen et al. reference by having the attachment apparatus be sets screws threadably received in the first end portion of the extension tube (rather than a threadable connection between the devices 40 and 22), since applicant has not disclosed that having this type of connection solves any stated problem or is for any particular purpose and it appears that the attachment apparatus would perform equally well with the threadable connection as disclosed in Andersen et al., or any type of releasable connection, for that matter.

10. Claims 15 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al.

Andersen et al. disclose all of the claimed invention except that the locking element is a spherical ball bearing. It would have been obvious matter of design choice to modify the Andersen et al. reference by having the locking element be a spherical ball bearing (rather than a pin), since applicant has not disclosed that having this type of locking element solves any stated problem or is for any particular purpose and it

appears that the locking element would perform equally well as a pin as disclosed in Andersen et al., or any type of releasable locking element, for that matter.

11. Claims 16-18 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. in view of Gill et al.

Andersen et al. disclose all of the claimed invention except that the hitch ball engaging assembly includes a rotatable locking collar movable between a first position operative to move the locking element into the locked state and a second position operation to move the locking element into the unlocked state, wherein the hitch ball engaging assembly also includes a latch operative to selectively retain the locking collar in a selected one of the first and second positions or wherein the hitch ball engaging assembly includes an actuator member adapted to move the locking collar between first and second positions. Gill et al. disclose a hitch ball engaging assembly including a rotatable locking collar (28) movable between a first position operative to move the locking element into the locked state and a second position operation to move the locking element into the unlocked state, wherein the hitch ball engaging assembly also includes a latch (14) operative to selectively retain the locking collar in a selected one of the first and second positions or wherein the hitch ball engaging assembly includes an actuator member (14) adapted to move the locking collar between first and second positions to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary (columns 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a rotatable locking collar movable between a first position operative to move the locking element into the locked state and

a second position operation to move the locking element into the unlocked state, wherein the hitch ball engaging assembly also includes a latch operative to selectively retain the locking collar in a selected one of the first and second positions or wherein the hitch ball engaging assembly includes an actuator member adapted to move the locking collar between first and second positions on the hitch ball engaging assembly of Andersen et al., as taught by Gill et al., in order to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary.

12. Claims 19-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. in view of Gill et al.

Andersen et al. disclose all of Applicant's claimed invention except for at least one spherical ball disposed in the hole in the second side wall and a rotatable locking collar movable between a first position operative to move the locking element into the locked state and a second position operation to move the locking element into the unlocked state, the second end portion has a plurality of holes formed therein and the hitch ball engaging assembly includes a plurality of spherical balls, there being a respective spherical ball disposed in a respective hole, each of the spherical balls movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion (c) said locking collar operative to move each of the spherical balls into the locked state when in the first position and to permit each spherical ball into the unlocked state when in the second position, wherein the holes are equiangularly disposed around the second end portion,

a base plate disposed on the second end portion of the extension member and a retaining ring disposed on the second end portion of the extension member in spaced relation to the base plate, the locking collar disposed between the retaining ring and the base plate, wherein the hitch ball engaging assembly includes an actuator member secured to the locking collar and adapted to move the locking collar between the first and second positions, the base plate includes a flange having a slot formed therein; the actuator includes an elongated rod projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot, wherein the hitch ball engaging assembly includes a latch operative to selectively retain the locking collar in a selected one of the first and second positions. Gill et al. disclose a hitch ball engaging assembly including a rotatable locking collar (28) movable between a first position operative to move the locking element into the locked state and a second position operation to move the locking element into the unlocked state, the second end portion has a plurality of holes (32) formed therein and the hitch ball engaging assembly includes a plurality of elements (40), there being a respective element disposed in a respective hole, each of the elements movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion, the locking collar operative to move each of the elements into the locked state when in the first position and to permit each spherical ball into the unlocked state when in the second position, wherein the holes are equiangularly disposed around the second end portion (Figure 3), a base plate (31) disposed on the second end portion of

the extension member and a retaining ring (88) disposed on the second end portion of the extension member in spaced relation to the base plate, the locking collar (28) disposed between the retaining ring and the base plate (Figures 1-3), wherein the hitch ball engaging assembly includes an actuator member (14) secured to the locking collar and adapted to move the locking collar between the first and second positions, the base plate includes a flange (33) having a slot (Figure 3) formed therein; the actuator includes an elongated rod (15) projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot (Figures 1-3), wherein the hitch ball engaging assembly includes a latch (14) operative to selectively retain the locking collar in a selected one of the first and second positions to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary (columns 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a rotatable locking collar (28) movable between a first position operative to move the locking element into the locked state and a second position operation to move the locking element into the unlocked state, the second end portion has a plurality of holes formed therein and the hitch ball engaging assembly includes a plurality of elements there being a respective element disposed in a respective hole, each of the elements movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion, the locking collar operative to move each of the elements into the locked state when in the first position and to permit each spherical ball into the unlocked state when in the second position,

wherein the holes are equiangularly disposed around the second end portion, a base plate disposed on the second end portion of the extension member and a retaining ring disposed on the second end portion of the extension member in spaced relation to the base plate, the locking collar disposed between the retaining ring and the base plate, wherein the hitch ball engaging assembly includes an actuator member secured to the locking collar and adapted to move the locking collar between the first and second positions, the base plate includes a flange having a slot formed therein; the actuator includes an elongated rod projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot, wherein the hitch ball engaging assembly includes a latch operative to selectively retain the locking collar in a selected one of the first and second positions on the hitch ball engaging assembly of Andersen et al., as taught by Gill et al., in order to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary. The modified Andersen et al. device discloses all of the claimed invention except that the elements are spherical balls. It would have been obvious matter of design choice to modify the Andersen et al. in view of Gill et al. device by having the elements be a spherical balls (rather than elements 40 as shown in Figure 3 of Gill et al.), since applicant has not disclosed that having this type of locking element solves any stated problem or is for any particular purpose and it appears that the locking element would perform equally well as a wedge as disclosed in Gill et al., or any type of releasable locking element, for that matter.

13. Claims 28-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. in view of Gill et al.

Andersen et al. disclose all of Applicant's claimed invention except for a plurality of holes formed through the side wall proximately to the second end; a base plate secured to the second end of the tube; a retaining ring secured to the second end portion of the extension member in spaced relation to said base plate, the holes in the second end portion located between said base plate and said retaining ring; a plurality of ball bearings, there being a respective ball bearing in a respective one of the holes, each said ball bearing movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion; a locking collar rotatably disposed between said retaining ring and said base plate, said locking collar operative to retain each said ball bearing in its respective said hole, movable between a first position operative to move each said ball bearing into the locked state and a second position operative to permit each said ball bearing to move into the unlocked state, including an actuator member secured to said locking collar and adapted to move said locking collar between the first and second positions, the base plate includes a flange having a slot formed therein; the actuator includes an elongated rod projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot, wherein said holes are equiangularly disposed around said second end portion. Gill et al. disclose a plurality of holes (32) formed through the side wall proximately to the second end; a base plate (31) secured to the second end of said tube; a retaining ring (88) secured to the second end portion of said extension member in spaced relation to said base plate, the holes in said second end portion

located between said base plate and said retaining ring; a plurality of locking elements (40), there being a respective locking element in a respective one of the holes, each said locking element movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion; a locking collar (28) rotatably disposed between said retaining ring and said base plate, said locking collar operative to retain each said locking element in its respective said hole, movable between a first position operative to move each said locking element into the locked state and a second position operative to permit each said locking element to move into the unlocked state, including an actuator member (14) secured to said locking collar and adapted to move said locking collar between the first and second positions, the base plate includes a flange (33) having a slot (Figure 3) formed therein; the actuator includes an elongated rod (15) projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot (Figures 1-3), wherein said holes are equiangularly disposed around said second end portion (Figures 1-3) in order to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary (columns 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a plurality of holes formed through the side wall proximately to the second end; a base plate secured to the second end of said tube; a retaining ring secured to the second end portion of said extension member in spaced relation to said base plate, the holes in said second end portion located between said base plate and said retaining ring; a plurality of locking elements, there

being a respective locking element in a respective one of the holes, each said locking element movable between a locked state thereby to prevent removal of a hitch ball that is received in the second end portion and an unlocked state to permit insertion and removal of a hitch ball into and out of the second end portion; a locking collar rotatably disposed between said retaining ring and said base plate, said locking collar operative to retain each said locking element in its respective said hole, movable between a first position operative to move each said locking element into the locked state and a second position operative to permit each said locking element to move into the unlocked state, including an actuator member secured to said locking collar and adapted to move said locking collar between the first and second positions, the base plate includes a flange having a slot formed therein; the actuator includes an elongated rod projecting radiallly outwardly from the locking collar, and a distal end portion of the rod being received in the slot, wherein said holes are equiangularly disposed around said second end portion on the device of Andersen et al., as taught by Gill et al., in order to permit the hitch ball engaging assembly to be disengaged from the hitch ball when necessary. The modified Andersen et al. device discloses all of the claimed invention except that the locking elements are spherical ball bearings. It would have been obvious matter of design choice to modify the Andersen et al. in view of Gill et al. device by having the locking elements be a spherical ball bearings (rather than elements 40 as shown in Figure 3 of Gill et al.), since applicant has not disclosed that having this type of locking element solves any stated problem or is for any particular purpose and it appears that the

locking element would perform equally well as a wedge as disclosed in Gill et al., or any type of releasable locking element, for that matter.

Allowable Subject Matter

14. Claims 10, 12, 13, 26, 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Luby whose telephone number is (703) 305-0441. The examiner can normally be reached on Monday-Friday, 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (703) 308-0629. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Matt Luby
Examiner
Art Unit 3611

m.l.
October 31, 2003